UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

65913

7590

12/24/2008

EXAMINER ROJAS, DANIEL E ART UNIT PAPER NUMBER

NXP, B.V.

NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ

1109 MCKAY DRIVE SAN JOSE, CA 95131

2816

DATE MAILED: 12/24/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,579	02/01/2008	Mihai Adrian Tiberiu Sanduleanu	NL04 0105 US1	8721

TITLE OF INVENTION: LATCH CIRCUIT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/24/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:**

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ				Cer	tificate	of Mailing or Transn	dission deposited with the United class mail in an envelope above, or being facsimile te indicated below.
1109 MCKAY I SAN JOSE, CA							(Depositor's name)
,			<u> </u>				(Signature)
							(Date)
APPLICATION NO.	NO. FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.
10/588,579	02/01/2008	Mi	hai Adrian Tiberiu Sandule	eanu	N	L04 0105 US1	8721
TITLE OF INVENTION APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	e eee	TOTAL FEE(S) DUE	DATE DUE
				l	E FEE		
nonprovisional	NO	\$1510	\$300	\$0 1		\$1810	03/24/2009
EXAM		ART UNIT	CLASS-SUBCLASS	J			
ROJAS, I		2816	327-218000 2. For printing on the p				
CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON			registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Comp	ified below, no assignee	data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assign assignment.			cument has been filed for
Please check the appropri	riate assignee category or	categories (will not be pa	rinted on the patent):	Individual 🖵 C	orporati	on or other private grou	p entity Government
			b. Payment of Fee(s): (Plea	ise first reapply a	ny prev	iously paid issue fee s	hown above)
Issue Fee	T - 11 (24) 12	20-15	A check is enclosed.				
Publication Fee (No small entity discount permitted) Advance Order - # of Copies			☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	,	*	_				
	s SMALL ENTITY state		b. Applicant is no loned from anyone other than t				(8, 1,
interest as shown by the	records of the United Sta	tes Patent and Trademark	COffice.	не аррисан, а гед	istered a	atorney of agent, of the	ussignee of other party in
Authorized Signature				Date			
Typed or printed name				-			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu. Virginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR	on is required to obtain or of 1.14. This collection is estay depending upon the individe Chief Information Office COMPLETED FORMS TO	retain a benefit by the imated to take 12 ridual case. Any coor, U.S. Patent and D THIS ADDRESS	he publ minutes omment Tradem S. SENI	ic which is to file (and to complete, including s on the amount of tim ark Office, U.S. Depa O TO: Commissioner fo	by the USPTO to process); gathering, preparing, and it you require to complete them to f Commerce, P.O. or Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

MED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Tiberiu Sanduleanu	NL04 0105 US1	8721
	EXAM	INER
	ROJAS, D	OANIEL E
NXP INTELLECTUAL PROPERTY DEPARTMENT		
	2816	
1109 MCKAY DRIVE SAN JOSE, CA 95131		
_	MED INVENTOR Tiberiu Sanduleanu	EXAM ROJAS, E ART UNIT

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)
	10/588,579	SANDULEANU ET AL.
Notice of Allowability	Examiner	Art Unit
	DANIEL ROJAS	2816
The MAILING DATE of this communication apperatus All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to and MPEP 1308.	olication. If not included will be mailed in due course. THIS
1. This communication is responsive to <u>response filed 10/1/20</u>	<u>008</u> .	
2. \square The allowed claim(s) is/are <u>2-17</u> .		
 Acknowledgment is made of a claim for foreign priority unally All b) ☐ Some* c) ☐ None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM 	been received. been received in Application No cuments have been received in this communication to file a reply received in this communication to file a reply received in the received in this communication to file a reply received in this communication to file a reply received in this communication to file a reply received in this received	national stage application from the
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
 A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give 		
5. \square CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the O	office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t		
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT		
Attachment(s)		
1. Notice of References Cited (PTO-892)	5. Notice of Informal Page 1	atent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary Paper No./Mail Dat	
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	7. Examiner's Amendn	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8.	nt of Reasons for Allowance
	3. LI Olliei	
	4-4-1	

Application/Control Number: 10/588,579 Page 2

Art Unit: 2816

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose an apparatus comprising elements being configured as recited in the claims. Specifically, none of the prior art teaches or fairly suggests the following features in combination with the other limitations of the claims:

- a. For claim 1, Sinh (US Patent No. 5,220,212) teaches a latch circuit (Figure 1) receiving an inverting input signal (as shown), non-inverting clock signal (101), an inverting clock signal (shown in Figure 2), and a common mode control signal; and producing a non-inverting output signal and an inverting output signal but fails to teach the first, second, third, fourth, fifth, and sixth transistors connected as claimed.
- b. For claim 10, Leifso et al (US Patent Application Publication No. 2003/0193355) teaches a latch circuit for differential input signals comprising: a first latch portion (130) and a second latch portion (132), each latch portion comprising: a differential input with an inverting input (Dn) and a non-inverting input (Dp); a differential output with an inverting output (Qn) and a non-inverting output (Qp); a control input which determines a threshold for the input signals such that when the input signal is larger than the threshold, the output latch is in a HIGH logic state and in a LOW state when the signal is smaller than the threshold; one of the outputs of the first latch portion (Qn) is coupled to the input of the second latch portion having opposite polarity (Dp); but fails to teach that one of the outputs of the second latch portion is coupled to one of the inputs of the

first latch portion having opposite polarity and a differential input signal to the latch circuit is coupled to one of the inputs of the first latch portion and to the input of the second latch portion having an opposite polarity.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL ROJAS whose telephone number is (571)270-5070. The examiner can normally be reached on Monday-Friday 7:30-8 EST, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/588,579 Page 4

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth B Wells/ Primary Examiner, Art Unit 2816

/D. R./ Examiner, Art Unit 2816